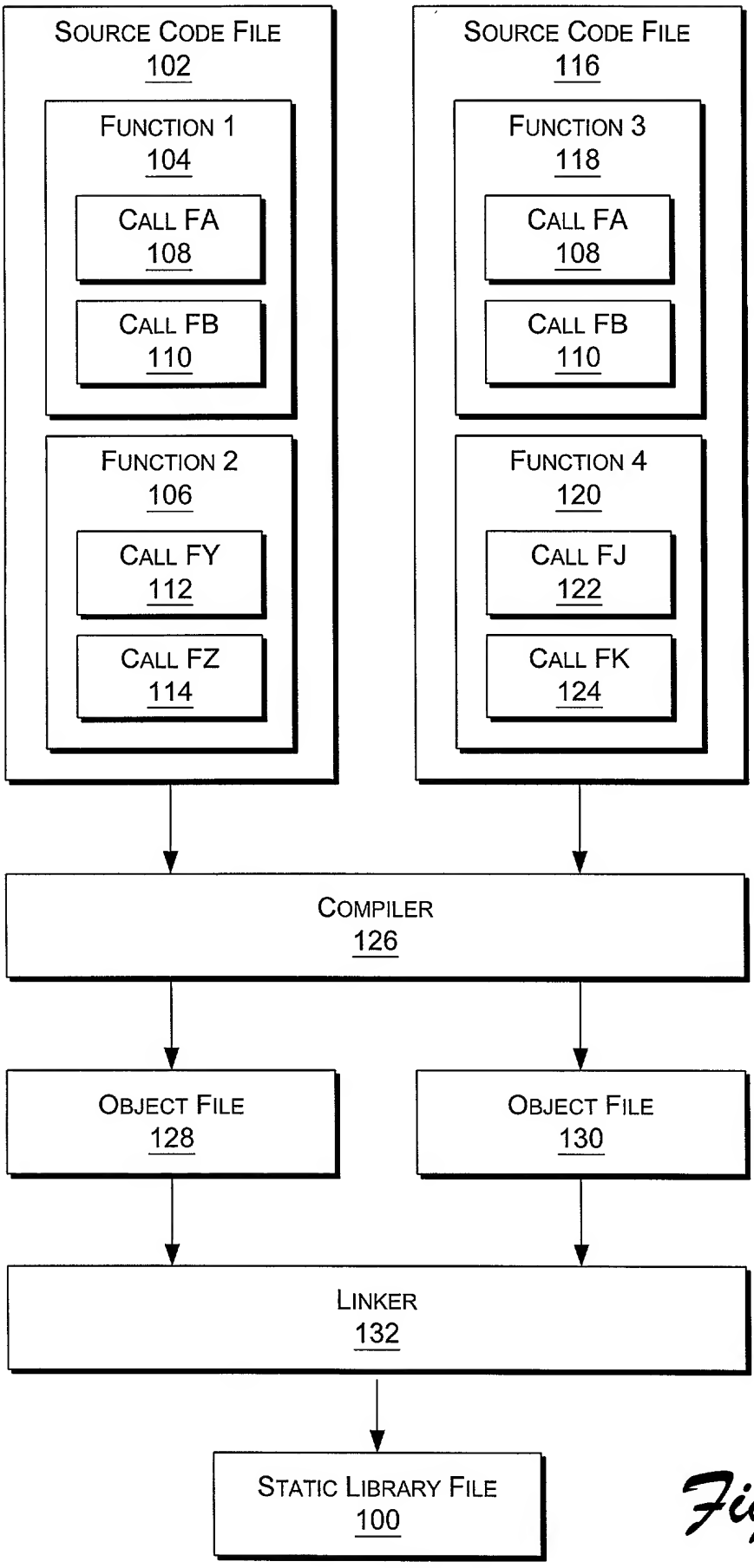

SOURCE CODE FILE
102
FUNCTION 1
104
CALL FA
108
CALL FB
110
FUNCTION 2
106
CALL FY
112
CALL FZ
114
SOURCE CODE FILE
116
FUNCTION 3
118
CALL FA
108
CALL FB
110
FUNCTION 4
120
CALL FJ
122
CALL FK
124
COMPILER
126
OBJECT FILE
128
OBJECT FILE
130
LINKER
132
STATIC LIBRARY FILE
100

Fig. 1

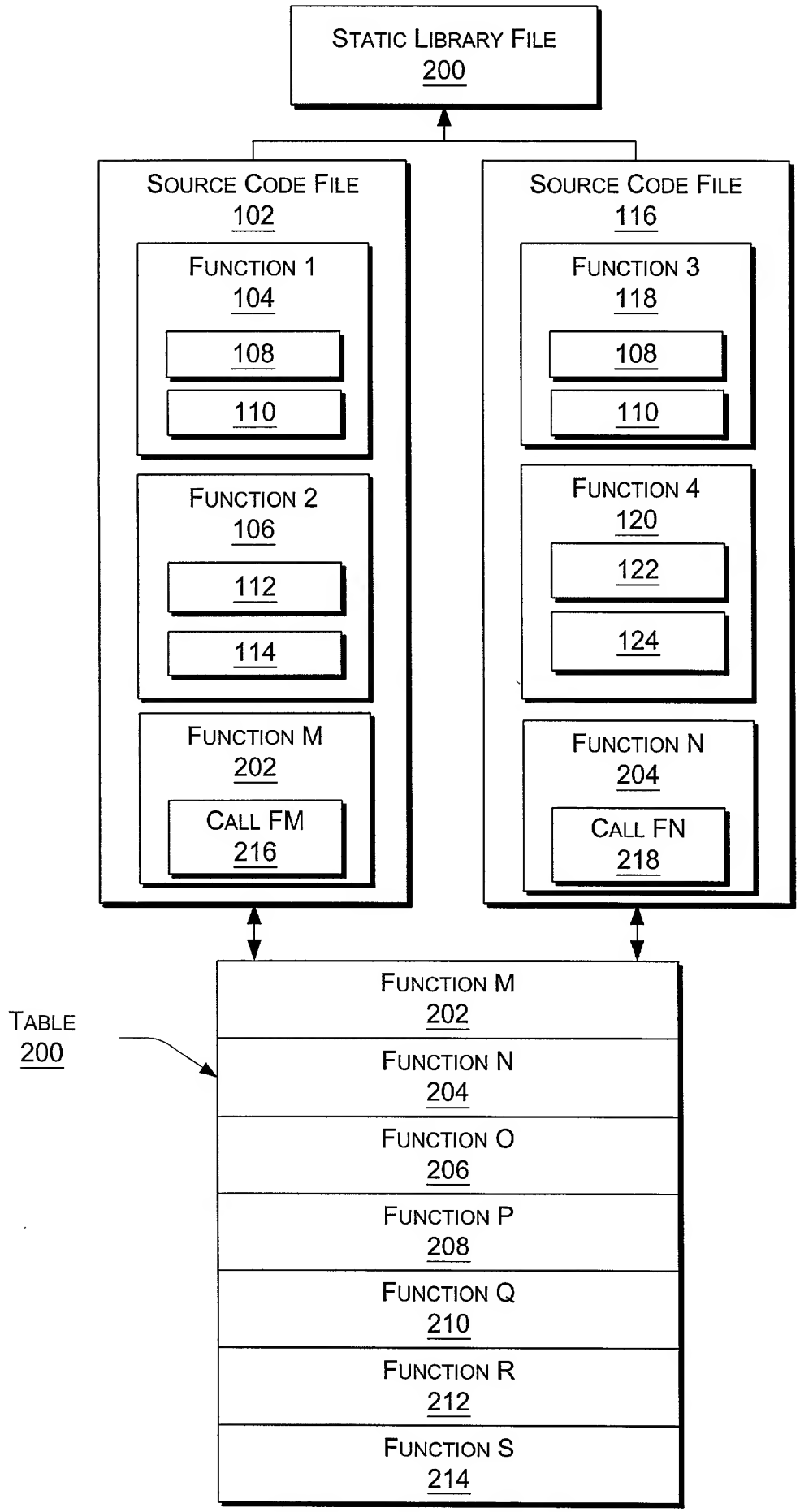
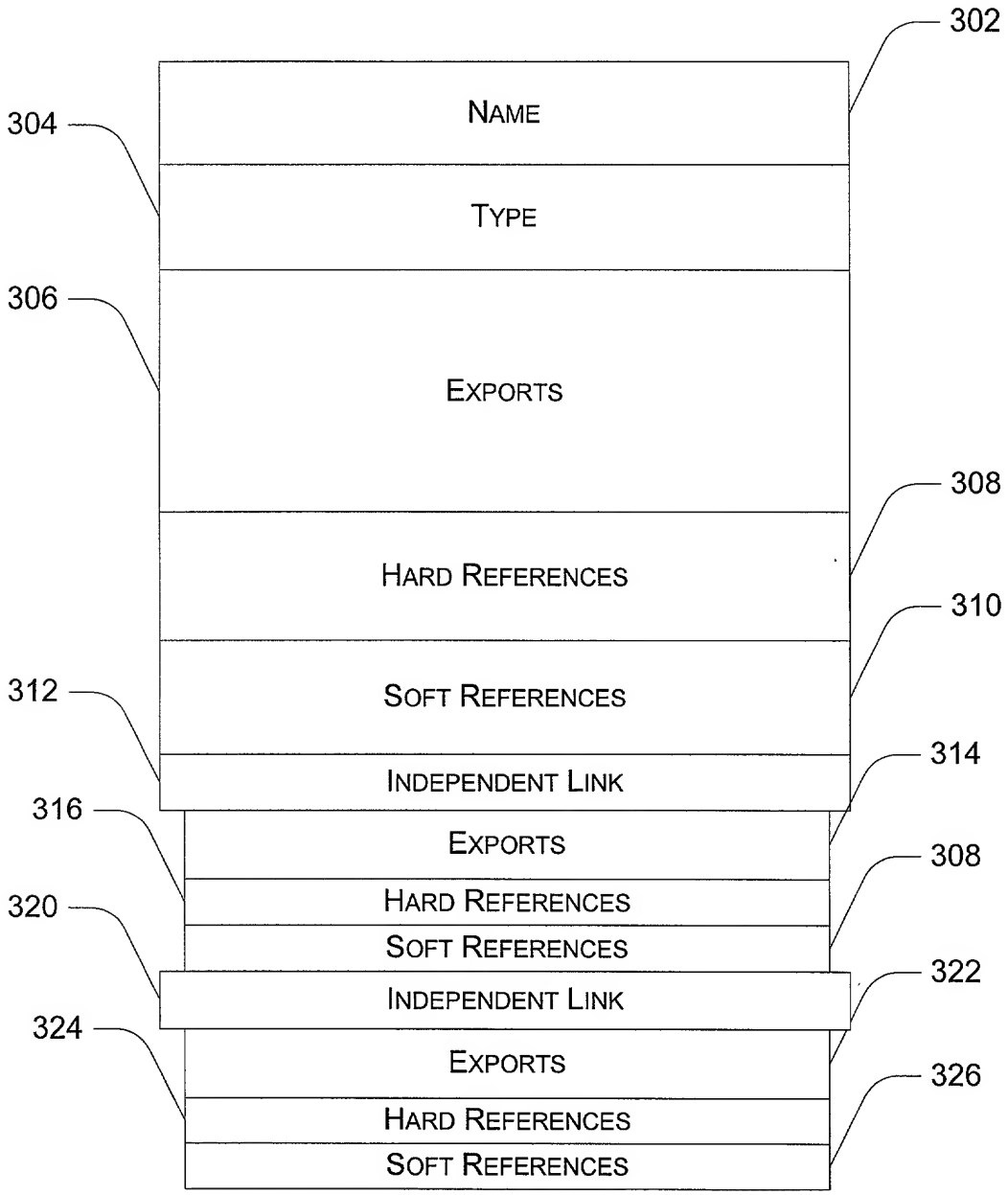

STATIC LIBRARY FILE
200
SOURCE CODE FILE
102
FUNCTION 1
104
108
110
FUNCTION 2
106
112
114
FUNCTION M
202
CALL FM
216
SOURCE CODE FILE
116
FUNCTION 3
118
108
110
FUNCTION 4
120
122
124
FUNCTION N
204
CALL FN
218
TABLE
200
FUNCTION M
202
FUNCTION N
204
FUNCTION O
206
FUNCTION P
208
FUNCTION Q
210
FUNCTION R
212
FUNCTION S
214

Fig. 2



DATA OBJECT
300

Fig. 3

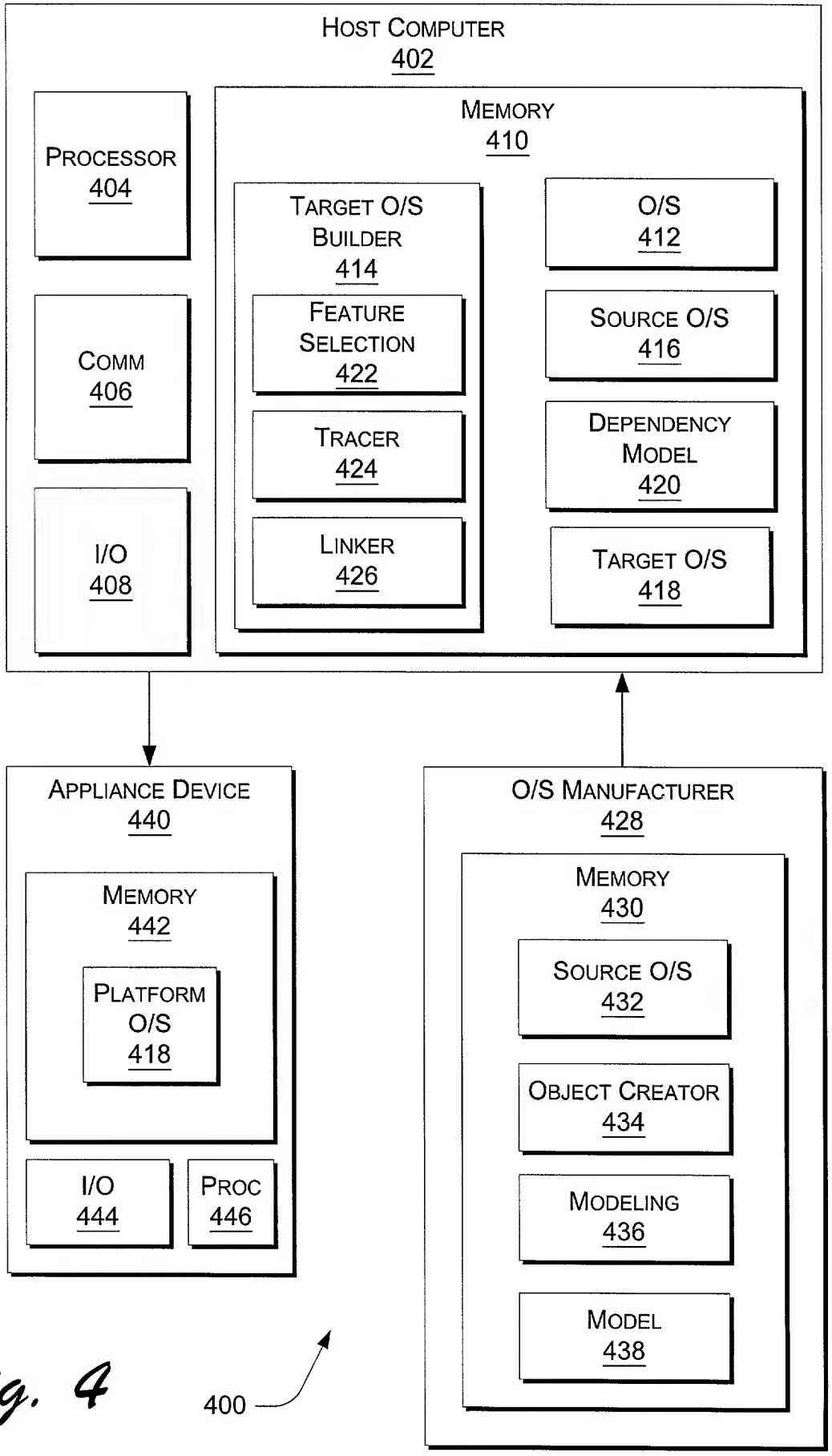

HOST COMPUTER
402
PROCESSOR
404
COMM
406
I/O
408
MEMORY
410
TARGET O/S
BUILDER
414
FEATURE
SELECTION
422
TRACER
424
LINKER
426
O/S
412
SOURCE O/S
416
DEPENDENCY
MODEL
420
TARGET O/S
418
APPLIANCE DEVICE
440
MEMORY
442
PLATFORM
O/S
418
I/O
444
PROC
446
O/S MANUFACTURER
428
MEMORY
430
SOURCE O/S
432
OBJECT CREATOR
434
MODELING
436
MODEL
438
400

Fig. 4

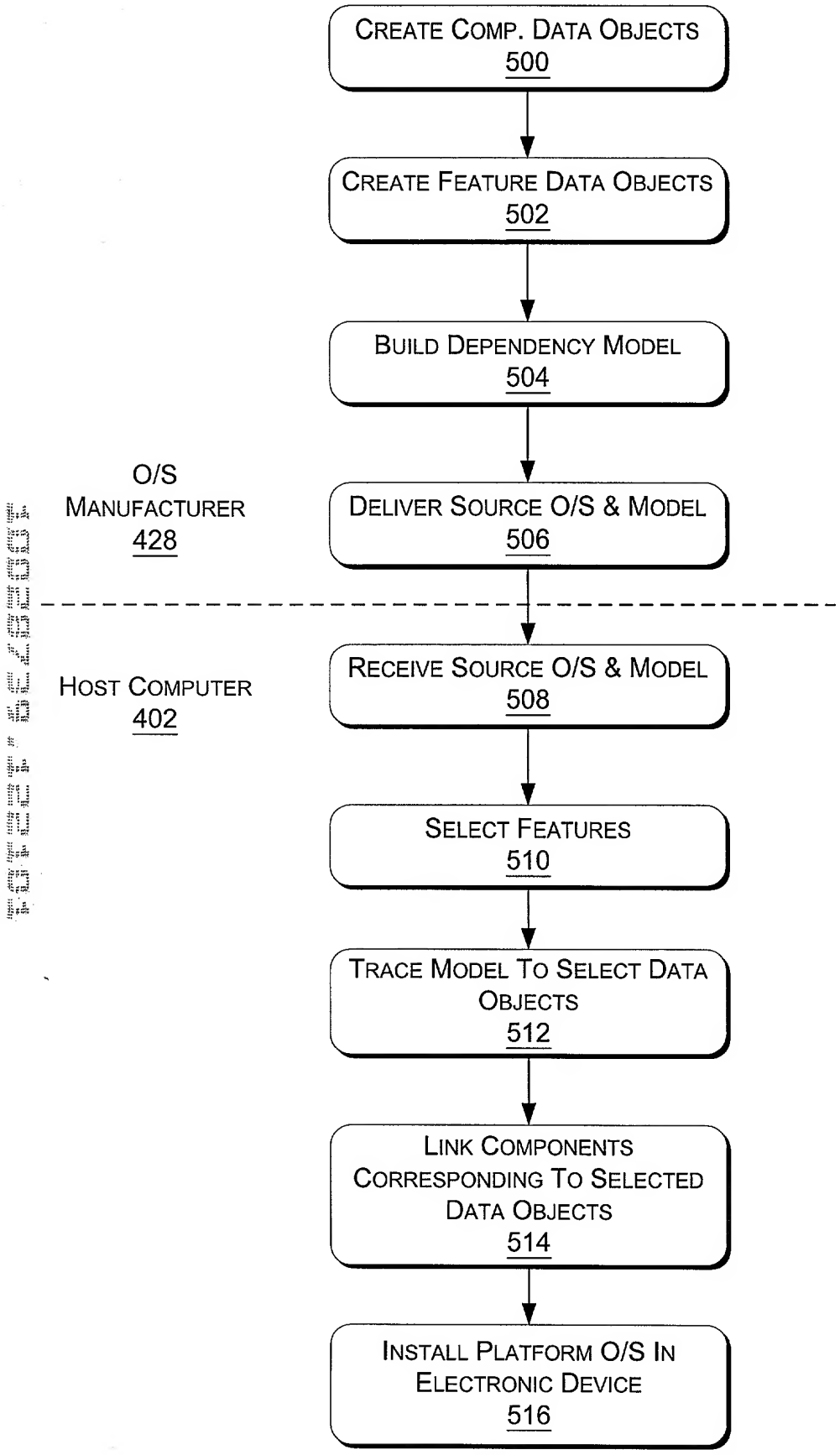

CREATE COMP. DATA OBJECTS
500
CREATE FEATURE DATA OBJECTS
502
BUILD DEPENDENCY MODEL
504
O/S MANUFACTURER
428
DELIVER SOURCE O/S & MODEL
506
HOST COMPUTER
402
RECEIVE SOURCE O/S & MODEL
508
SELECT FEATURES
510
TRACE MODEL TO SELECT DATA OBJECTS
512
LINK COMPONENTS CORRESPONDING TO SELECTED DATA OBJECTS
514
INSTALL PLATFORM O/S IN ELECTRONIC DEVICE
516

Fig. 5

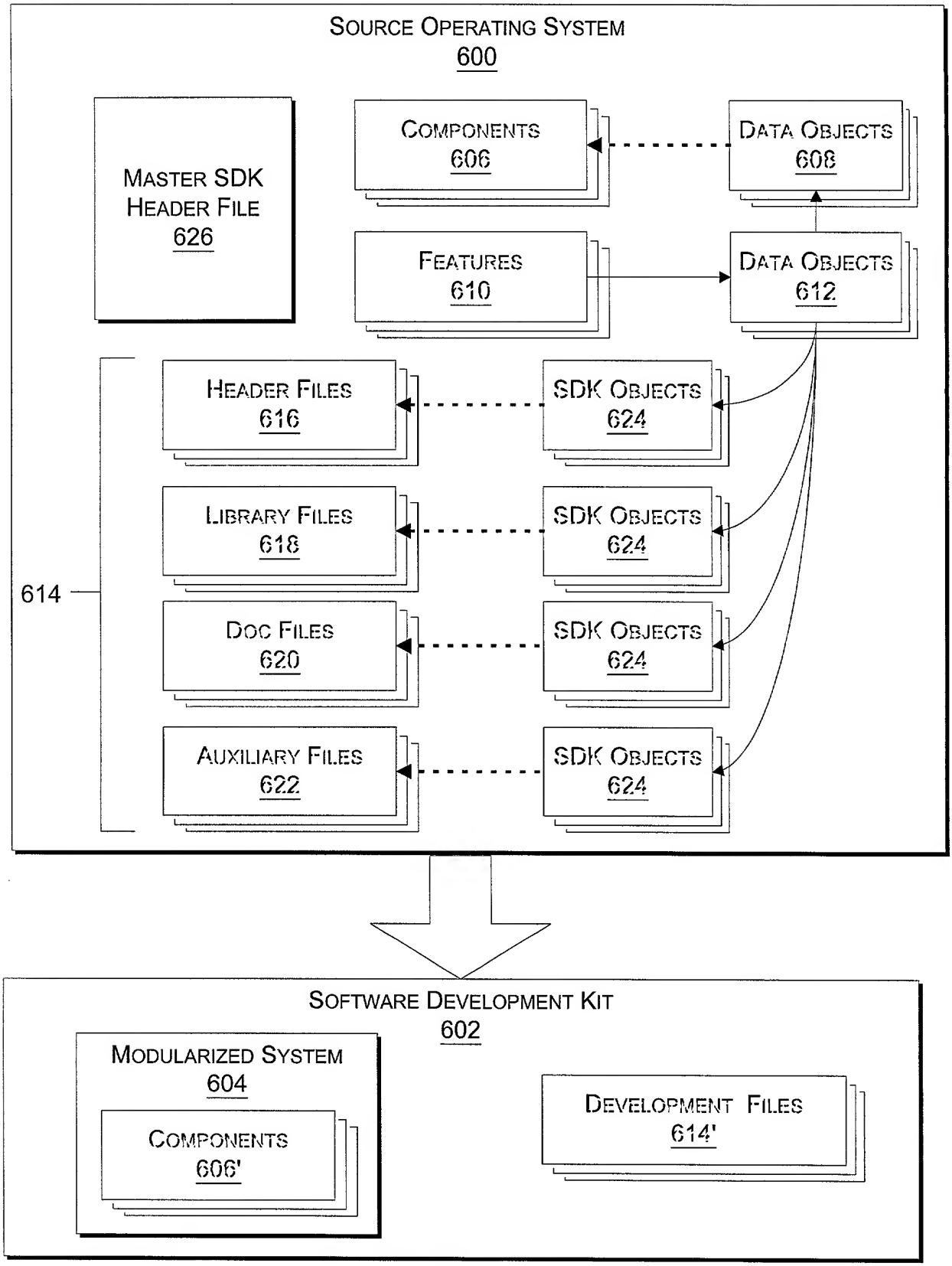
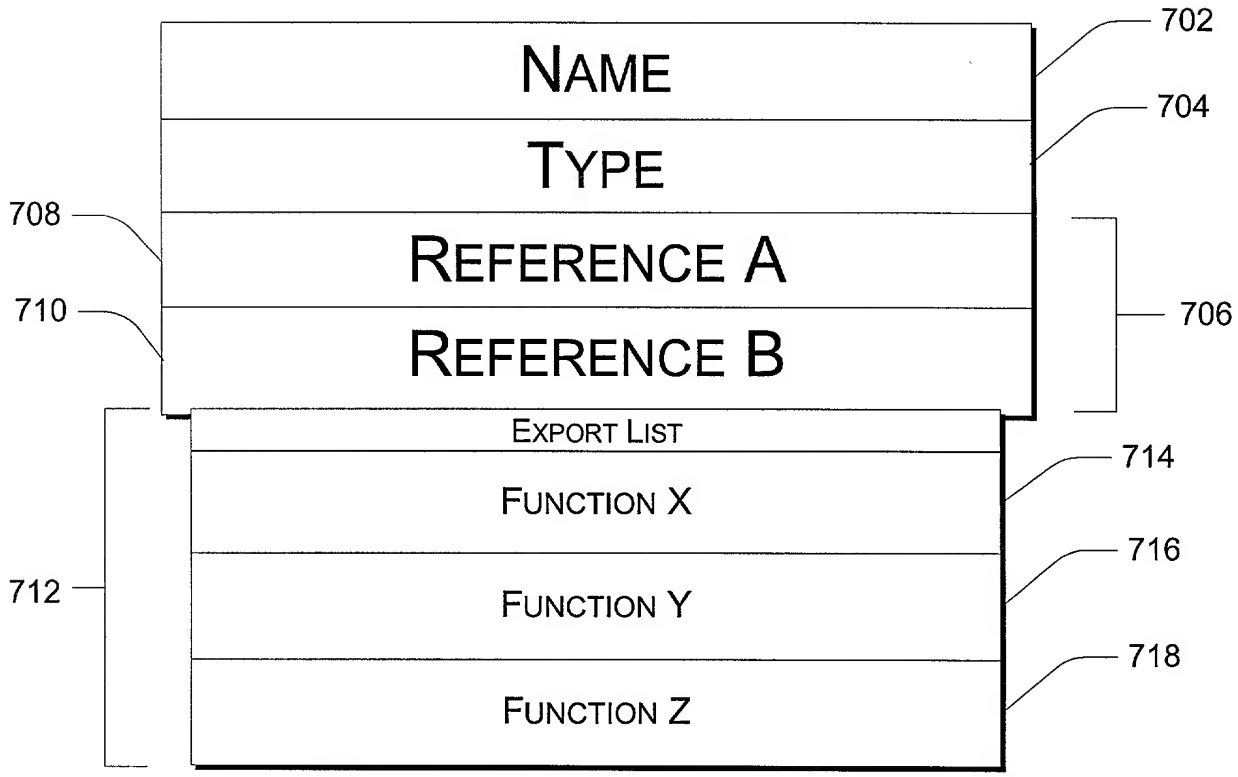

SOURCE OPERATING SYSTEM
600
MASTER SDK HEADER FILE
626
COMPONENTS
606
DATA OBJECTS
608
FEATURES
610
DATA OBJECTS
612
HEADER FILES
616
SDK OBJECTS
624
LIBRARY FILES
618
SDK OBJECTS
624
DOC FILES
620
SDK OBJECTS
624
AUXILIARY FILES
622
SDK OBJECTS
624
614
SOFTWARE DEVELOPMENT KIT
602
MODULARIZED SYSTEM
604
COMPONENTS
606'
DEVELOPMENT FILES
614'

Fig. 6



SDK OBJECT
700

Fig. 7

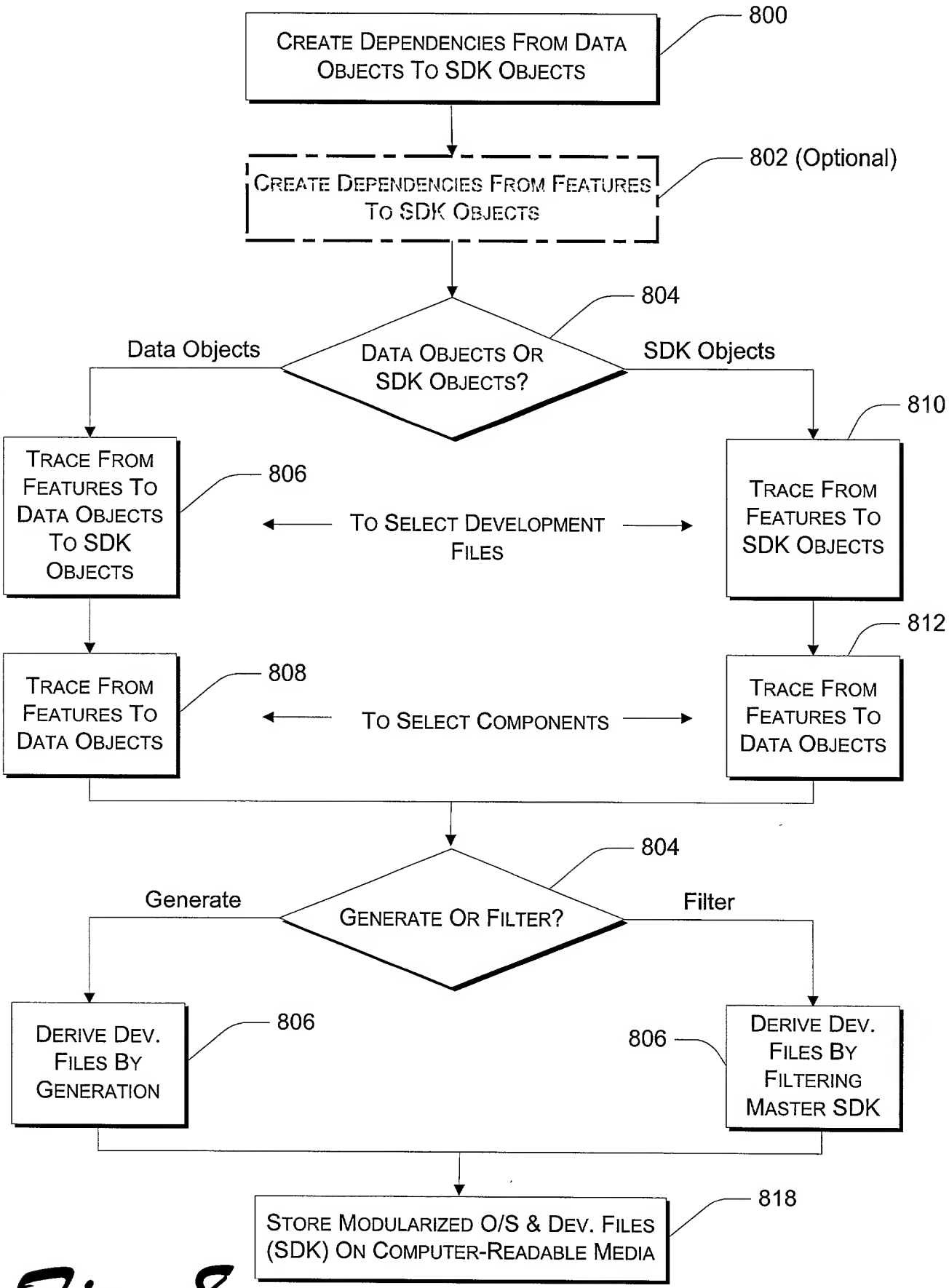

CREATE DEPENDENCIES FROM DATA OBJECTS TO SDK OBJECTS
800
CREATE DEPENDENCIES FROM FEATURES TO SDK OBJECTS
802 (Optional)
804
DATA OBJECTS OR SDK OBJECTS?
Data Objects
SDK Objects
TRACE FROM FEATURES TO DATA OBJECTS TO SDK OBJECTS
806
TO SELECT DEVELOPMENT FILES
TRACE FROM FEATURES TO SDK OBJECTS
810
TRACE FROM FEATURES TO DATA OBJECTS
808
TO SELECT COMPONENTS
TRACE FROM FEATURES TO DATA OBJECTS
812
804
GENERATE OR FILTER?
Generate
Filter
DERIVE DEV. FILES BY GENERATION
806
806
DERIVE DEV. FILES BY FILTERING MASTER SDK
STORE MODULARIZED O/S & DEV. FILES (SDK) ON COMPUTER-READABLE MEDIA
818

Fig. 8

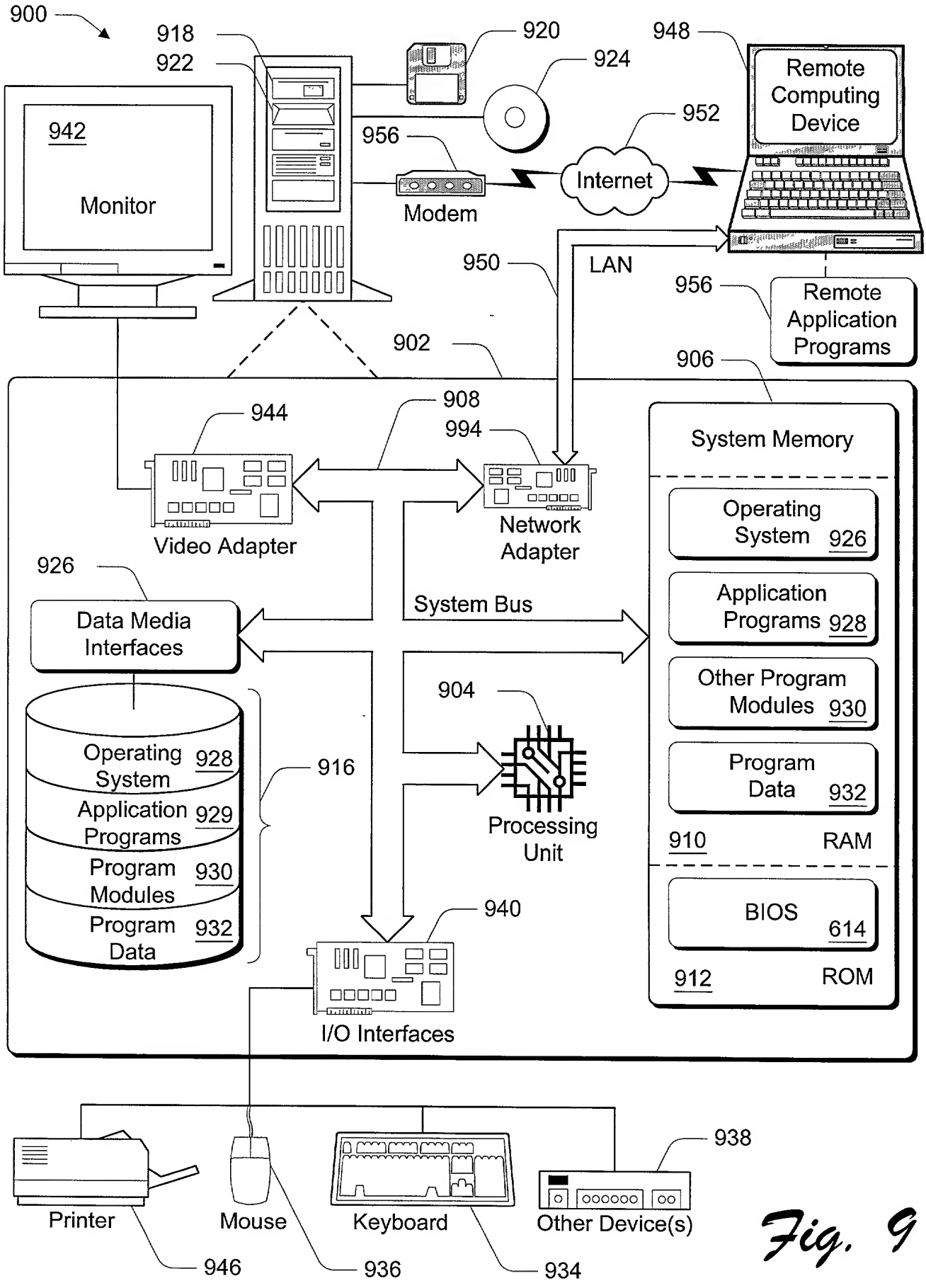

900
918
922
920
924
948
Remote Computing Device
942
Monitor
956
Modem
952
Internet
950
LAN
956
Remote Application Programs
902
906
908
944
994
System Memory
Video Adapter
Network Adapter
Operating System 926
926
Application Programs 928
Data Media Interfaces
System Bus
Other Program Modules 930
904
Program Data 932
Operating System 928
916
Application Programs 929
Processing Unit
910
RAM
Program Modules 930
Program Data 932
940
BIOS 614
912
ROM
I/O Interfaces
938
Printer
Mouse
Keyboard
Other Device(s)
946
936
934

Fig. 9

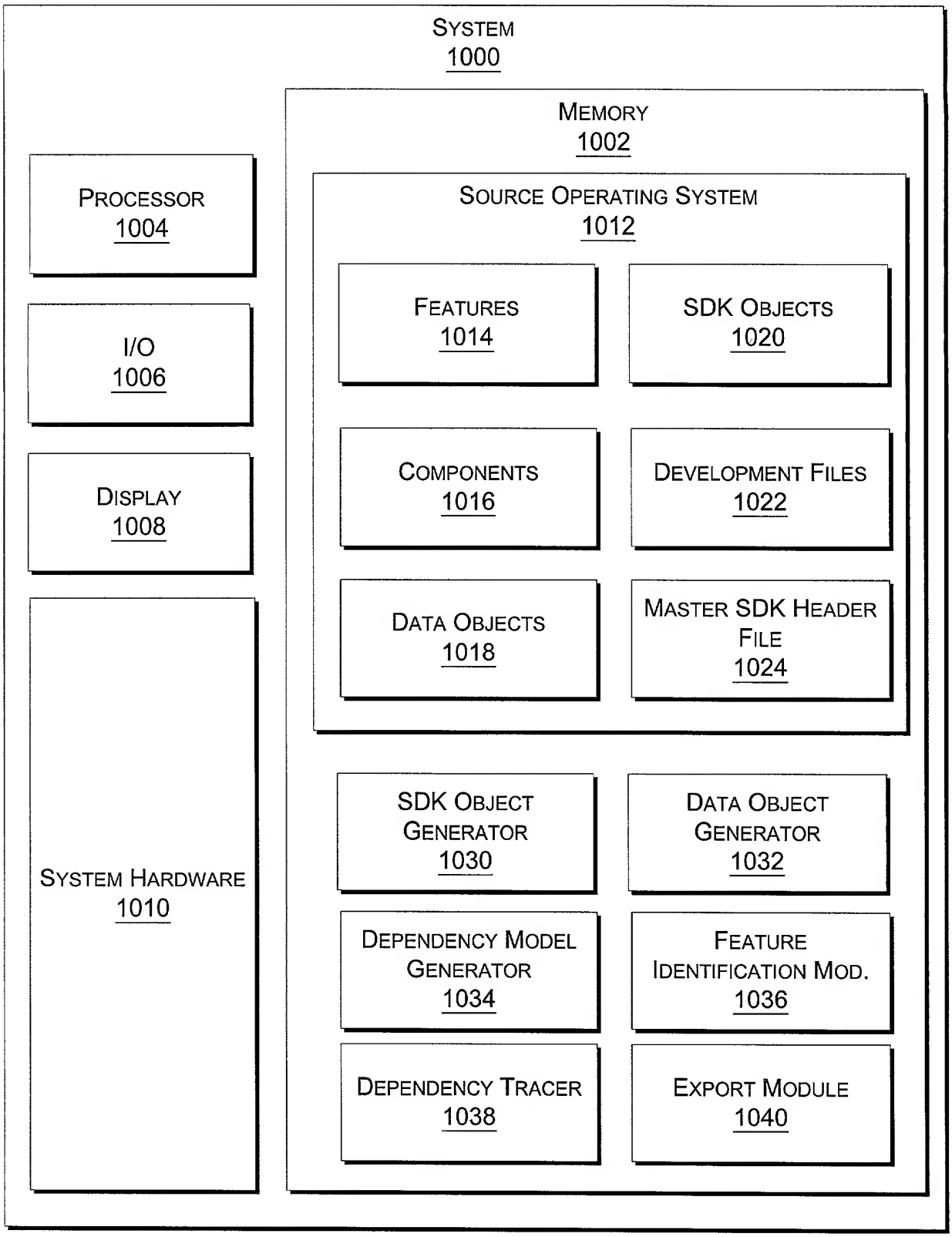

SYSTEM
1000
MEMORY
1002
PROCESSOR
1004
I/O
1006
DISPLAY
1008
SYSTEM HARDWARE
1010
SOURCE OPERATING SYSTEM
1012
FEATURES
1014
SDK OBJECTS
1020
COMPONENTS
1016
DEVELOPMENT FILES
1022
DATA OBJECTS
1018
MASTER SDK HEADER FILE
1024
SDK OBJECT GENERATOR
1030
DATA OBJECT GENERATOR
1032
DEPENDENCY MODEL GENERATOR
1034
FEATURE IDENTIFICATION MOD.
1036
DEPENDENCY TRACER
1038
EXPORT MODULE
1040

Fig. 10